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Article (Accepted Version)

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Journal:	*Journal of Applied Accounting Research*
Manuscript ID	JAAR-06-2015-0058.R2
Manuscript Type:	Research Paper
Keywords:	financial reporting, Disclosure theories, Financial Statement Analysis, Impression Management, performance, Performance measurement

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Introduction

Key Performance Indicators (KPIs) are intrinsic to recent developments in corporate financial reporting such as Integrated Reporting. Descriptive analysis on the status of KPI reporting in the UK and elsewhere is extensive. The practitioner-based literature routinely documents the number and type of disclosures, typically linked to the question of compliance with the terms of the Companies Act requirements (Deloitte, 2014; Tauringana & Mangena, 2009; ICAS, 2014). Largely, this literature documents a marked increase in the size and diversity of KPI reporting[1].

The academic literature has in the main focused on the value relevance of non-financial information embodied in KPIs, and a sizable body of work is available that shows that the additional information contained in these KPIs can predict future earnings. This predictive value notwithstanding, it is also widely reported that KPIs are difficult to compare across (and even within) industries, and that they are not audited and may therefore be prone to bias and game play. To address these concerns, two solutions have recently been proposed: (1) standardisation of KPIs by an independent body (International Integrated Reporting Council, 2012), and (2) KPI assurance by external auditors (ICAEW, 2014). This study concentrates

[1] Deloitte found that companies disclose on average 8.0 KPIs (2013 8.1) split into 5.5 financial and 2.5 non-financial (2013 5.3:2.8) (Deloitte, 2014). Further in their 2013 survey they found that the majority of companies do present a profit based KPI 79% (2012 77%) and a revenue based KPI 67% (2012 67%) (Deloitte, 2013).

on the desirability of these two aspects of KPI disclosure from the viewpoint of the professional equity analyst.

The audience for KPIs and corporate reporting in general is broad and diverse, but typically, one would expect professional equity analysts to be prominent users of the KPI section of the accounts. In fact they are specifically mentioned as the target audience by the Companies Act 2006 (s 417 (2)). In this paper the views of experienced equity analysts, on the value of non-GAAP key performance indicators in the Annual Report, are documented and discussed. An examination of the determinants of usefulness is undertaken including, to what extent consistency of calculation is an issue, and to what extent assurance of these KPIs by external partners such as audit firms is desirable.

The contribution of this study, then, is to strengthen and augment financial disclosure theory by focusing on equity analysts' evaluations of the usefulness, potential standardisation, and assurance of non-Generally Accepted Accounting Practices (GAAP) KPIs. It bridges the gap between the academic studies that tend to focus on the decision usefulness aspect and the practice based literature that tends to focus on the more practical aspects of regulatory compliance. It does this by analysing the use of the disclosure outputs and considering the interaction of the legislative requirements to disclose and less observable internal considerations in terms of Gibbins et al.'s 1990 theoretical model of the disclosure process.

KPI reporting is an area that continues to attract attention as part of the annual reporting cycle, particularly through the Integrated Reporting movement. Other normative drivers include the European Securities Market Authority guidelines on Alternative Performance Measures due to be implemented in 2016 (European Securities and Markets Authority, 2015) and the review of alternative performance measures by the International Accounting Standards Board (IASB) as part of its Disclosure Initiative with a discussion paper anticipated in 2016. Consequently, insight into the actual usefulness of these measures is important to inform this debate on presentation of the corporate 'narrative'. This goes some way to addressing the unanswered questions in Healy and Palepu (2001) and the calls for further qualitative research in the area (Watson et al., 2002 (Tauringana & Mangena, 2006).

The paper documents and discusses the views of twelve experienced, professional equity analysts, all with active careers in the City of London. Such information is valuable in itself because equity analysts are an important group of intended recipients of KPI information, and their experiences provide a useful insight into a user perspective on the reporting of KPIs. It is rare to find the views of experienced equity analysts on financial reporting in the academic literature due to considerable barriers around access.

The structure of the rest of the paper is as follows. The next section briefly summarises voluntary KPI disclosure in the academic literature and provides a background of KPI reporting in the UK. This leads to three research questions that provide the basis for the interviews. The findings follow further details of the interview method. A discussion and conclusion section completes the paper.

Theory and research questions

Theory around disclosure has evolved from a number of different angles. Gibbins, Richardson and Waterhouse, (1990) establish an influential model in which a firm's disclosure outputs are driven by its disclosure position, external norms and opportunities, disclosure structures and other external and internal mediators. Relevant to the subject of this study is Gibbins et al.'s notion of credibility of disclosure. The employment of external agents who can attest to the veracity of the information (i.e., assurance) can enhance this credibility as well as by disclosure reputation. Consistency of disclosure over time in turn strengthens this reputation.

In particular, this study focuses on the complex drivers affecting the disclosure process. The most observable of these are the external antecedents affecting disclosure of KPIs including the legislative requirements, and industry norms. Whilst not a specific consideration the paper the internal antecedents are recognised as having a significant influence on the disclosure position of the company. These include the company’s disclosure position and its experiences of disclosure in the past i.e. how analysts have reacted to both good and bad news. The study focuses on the usefulness and quality of disclosure output. The intended body of users of this output is the investment community. One aspect that analysts highlighted as relevant was the timing of the disclosure. Gibbins et al. identified timing as a dependent variable in their disclosure outputs.

From an economic-analytical perspective, the provision of KPIs in the Annual Report falls into a broad category of scenarios in which managers of risky assets choose to share discretionary information on these assets with investors. A large body of economics-based work is available that analyses this scenario. This work often referred to as voluntary disclosure theory (VDT), offers an explanation for disclosing information based on elements of signaling theory and agency theory: managers (agents) have superior information of the firm, and choose to disclose this to traders (principals) with the principal aim of reducing information asymmetry. The quality of the information serves as a management signal that traders use to decide to inject or withdraw capital to the firm (Verrecchia, 1983, 1990). Information is provided to capital providers both ex ante, i.e., before capital is committed, to serve a valuation role and ex post, i.e., after capital has been committed, to serve a stewardship role (Beyer et al., 2010).

Empirical research has focused on the value relevance of discretionary information (Elzahar, et al., 2015), and if it exists, whether analysts and investors are able to extract this information and make better decisions in terms of valuation (for example, improved forecasting of future earnings). Acknowledging that KPIs are often idiosyncratic to an industry, studies have in the main focused on non-financial information in specific industries. Ittner and Larcker (1998a) looked at non-financial performance indicators in telecommunications sector. In their analysis of the US retail industry Cole and Jones (2004) found that the level and change of comparable store sales growth positively affected future earnings growth and stock returns. In the telecommunications industry, certain KPIs can help predict future earnings (Amir & Lev, 1996), but analysts are not always able to pick this up due to the non-persistent character of disclosure (Simpson, 2010). Non-financial information about customer relationships in this industry (such as customer acquisition cost and customer retention) emerges as an important firm value driver (Livne, Simpson, & Talmor, 2011). In the airline industry, non-financial performance indicators such as airline service quality, passenger safety, and load factors are important (Behn & Riley, 1999; Leidtkda, 2002). Patent data can be value relevant in the high-tech industry (Hirschey et al., 2001). More generally a disconnect between trends in non-financial and financial performance indicators can detect a risk of fraud (Brazel & Zimbelman, 2009).

Non market-based empirical studies also reinforce the fact that analysts use non-financial information for value. For example, Orens and Lybaert (2010) show that analysts make more use of non-financial information if earnings information content is low. Although these studies show an association between KPI information and future earnings, they do not show how, or whether, analysts actually use this information in their valuation models. Coram et al. (2011) demonstrate using conduct verbal protocol study with eight analysts that analysts do indeed use this information for valuation purposes, in particular if the KPIs exhibited a negative trend.

Given the general intention that the publication of KPIs provides supplemental information for the users of the accounts, it should follow that, firms that disclose more useful KPIs to the users should benefit from a reduction in information asymmetry and therefore more accurate analyst expectations. However, it should be noted that many studies tend to use length of disclosure as a measure of complexity within the financial statements rather than the incremental value that the additional information provides which of course is a more subjective assessment (Filzen & Peterson, 2015). It is arguable that the inclusion of previously disclosed information can be justified if 'its inclusion aids the users' understanding, or economizes on their time, or reduces the cost of obtaining the information elsewhere' (Watson et al., 2002).

The impressions management literature uses various techniques summarized in Brennan et al. (2009). These typically focus on classifying the information in some kind of objective manner, frequently through the extraction of key words, use of quantitative measures, visual presentation or performance comparisons and tend to conclude on disclosure quality e.g. Beattie et al. 2004 where researchers produced a comparative analysis against a sector norm. It is our contention that equity analysts will be a key source of information about the norms of KPI disclosure in the specialist subsectors they cover.

Focusing on the disclosure of KPIs specifically in the UK Annual Report, a small number of studies shed light on this issue. Rowbottom and Lymer (2010) conducted a study into the use of narrative reporting in the online annual report. This study focused on 15 FTSE350 companies and concluded that shareholders tended to rely on private disclosure whereby they were in receipt of the information in advance of the annual report. Although online narrative reporting accounted for the majority (68%) of user requests, the most frequently used sections were those that contained the traditional financial information. This may point to the fact that analysts derive the same information from other sources e.g. press releases, analyst presentations (Cascino, et al., 2014). In fact, Barker confirms this view with 80% of his sample of FTSE100 Finance Directors placing the final results announcement as a more value relevant event than the publication of the Annual Report (Barker, 1998).

Apart from the Coram et al. (2011) study, the academic literature does not yet cover in detail the use and usefulness of KPIs from the viewpoint of equity analysts themselves, i.e., from the insider perspective. As yet it is unclear whether the KPIs that *are* useful share common characteristics with those that are less so, even though they may be very different across industries and sectors. The study therefore commences with a general first research question.

RQ1: *Are KPIs indeed useful to equity analysts, and are there elements of usefulness that are more generic across KPIs?*

Integrated reporting, whereby the narrative front end and the financial back-end of the annual report linked together, is gaining momentum through the International Integrated Reporting

Committee (IIRC). A framework was published in 2013 and, whilst KPIs are intrinsic to the integrated report, there remains significant flexibility for the reporting entity to determine which are relevant and how best to calculate them.

The IIRC did raise the possibility of a project to 'develop a database of authoritative, external sources of KPIs' (International Integrated Reporting Council, 2012) in response to respondents concerns over the comparability between companies KPI calculations. This lack of comparability of KPI measures with the same title was also highlighted by ICAEW in its retail sector report, specifically in relation to like-for-like sales (LFL) which are widely used as an indicator of underlying retail performance (ICAEW, 2014).

Consistency of calculation would improve comparability, a key concern of financial reporting. The IFRS Conceptual Framework lists comparability as the first enhancing qualitative characteristic of financial information (alongside verifiability, timeliness, and understandability). The Framework points out that consistency and comparability are not the same: "consistency refers to the use of the same methods for the same items, either from period to period within a reporting entity or in a single period across entities. Comparability is the goal; consistency helps to achieve that goal." (Conceptual Framework QC22). Given the importance of comparability, the second research question is as follows:

RQ2: *Are KPIs calculated consistently and would standardisation be helpful?*

The use of advisors to increase the legitimacy of various elements of corporate disclosure is widespread and fits firmly the Gibbins et al. (1990) model. As external advisors, auditors can provide companies with a superior claim to disclosure verifiability. There has been a growing momentum behind calls for auditors to provide some assurance over the narrative elements of the annual report (ICAEW, 2013, ICAS, 2014). Consequently, it appears that there is indeed a value attached to the disclosures in this part of the report. In fact, this part of the report continues to grow in volume and perceived importance. In the Deloitte's 2014 annual survey of FTSE350 companies the length of the Annual Report grew again in the year and is now

156 pages (2013 151 pages), with narrative reporting comprising 60% of the report (2013 58%) (Deloitte, 2014).

A recent ICAEW publication has highlighted the possibility of a separate assurance provided over KPIs rather than the full narrative part of the Annual Report (ICAEW Audit and Assurance Faculty, 2014). This may be a more achievable step in the short term since auditors can determine whether sufficient evidence exists that the measure has been calculated in accordance with the published methodology and whether it is appropriate as well as verifying the inputs to the calculation. In fact, the paper cites two cases where assurance over KPIs takes place under the current reporting regime (Statoil 2012, Centrica 2012).

It should be noted that the linkage between the published KPIs and the targets for management published as part of the remuneration report calls for an increased level of scrutiny from investors as they can now exercise their powers to vote to reject the remuneration report (Cabinet Office, 2006). Further, the seeming reliance by analysts on advance disclosures made by companies in earnings announcements and investor presentations may mean that it is desirable to increase the degree of assurance over such elements of the overall corporate reporting package.

Given these interests in further assurance of KPIs, the third and final research question is as follows:

RQ3: *Would assurance of KPIs by audit firms be helpful?*

Method

A semi-structured interview method was adopted to obtain insight into the relative usefulness of KPIs. In this instance other methods, such as content analysis of KPIs in annual reports, were not regarded as suitable in providing insight into the usefulness of the measures to investors. Disclosure of corporate KPIs tends to vary significantly and is not always in a specially titled section. They also tend to cover a diverse range of measures, making data collection using content analysis method a largely manual task. Further, this level of data would not provide insight into the actual usefulness of the measures for users of the accounts. Whilst KPI disclosure may be driven by legislative demands as well as internal factors for increasing transparency it may well be the case that significant amounts of the disclosure is 'ritualistic' in Gibbins terms (Gibbins et al. 1990) and it may not actually be increasing the users' understanding of the company at hand.

11 semi-structured interviews were conducted with experienced equity analysts in the City of London to gain insight into the research questions developed in the previous section. The interviews followed a protocol that included a structured questionnaire, which covered elements of each research question. The questionnaire was available to a number of equity analysts as well as through an online survey package. This resulted in one completed response from one equity analyst. After careful review, the additional questionnaire was incorporated into the dataset resulting in a total sample of 12 equity analysts. All analysts provided written consent for their responses to be included in the study.

Analyst recruitment for the study relied upon on the network of one of the authors, who has previous experience as an analyst in the City. To a degree, recruitment of interviewees followed a snowballing approach as the interviews progressed. All interviews took place under condition of anonymity, and for this reason, the paper does not attribute findings and quotations to individual interviewees. Prior to further analysis all interviews, except the online return, were recorded and transcribed.

All equity analysts were male and had considerable experience in the sector, with many of them having qualified as Chartered Accountants earlier in their careers. This is an accepted career route into equity analysis from a typical 'Big Four' training. Table 1 reports further demographic details and industries covered.

INSERT TABLE 1 HERE

The next section presents the findings of the interviews. Quotations selected for inclusion represent commonly held views or highlight a particular result. All interviews followed a predefined interview protocol and covered all research questions. Where the equity analysts touched on tangential topics comments are included if they are relevant to the research questions of the study.

Results

The structure of this section follows the three research questions that were put forward earlier in the paper. It focuses on (1) information usefulness aspects of KPIs, (2) consistency and comparability, and (3) assurance.

Information Quality

All analysts expressed a great deal of interest in KPIs, and all of them pointed to a number of KPIs that they deemed useful. At the same time, some warned against the over-use of KPIs, which did not necessarily add value, presented in order to be in line with other companies i.e. the external norms of the market driving the ritualistic element of Gibbins et al.'s (1990) disclosure framework:

> *"They often want to show a selection of arbitrary metrics that relate one accounting number to another accounting number, which is a fairly typical thing"Q17*

In particular the analysts' comments appear to be consistent with the view that companies are providing certain ratios to indicate that they care complying with industry best practice in line with signalling theory (Watson et al., 2002). Others warned about the overwhelming amount of information in annual reports in general:

> *"I remember, when I started, annual reports that were about 30 pages long. Some of the worst are now 230 and most of that, 170, is utter rubbish where I'm concerned*"

Having said that, many analysts felt that *not* disclosing critical KPIs was very unhelpful, as in the case of one company in the food retail sector:

> *".. they don't give you an ex VAT sales figure. Their like-for-likes include extensions, they don't give us a proper gross margin, they don't tell us what their transfer costs*

are, they don't tell us their cost of inventory properly. The level of disclosure from that side means you can basically make the earnings whatever you want"

This is in line with the proposition that industry norms can drive disclosure (Tarca et al., 2011).

Preliminary announcements of the financial results such as the preliminary earnings releases ("prelims") and analyst presentations were the source of the vast number of useful KPIs. The annual report can come up to four months after the year-end for London Stock Exchange Main Market (per the Disclosure and Transparency rules) companies. The Deloitte survey found that in fact the average time to report was 62 days after year end in 2014 (2013 62 days) (Deloitte, 2014). In fact out of the Deloitte sample only 12 companies produced their prelims based on unaudited information (2013 10 companies) indicating a great deal of reliance can be placed upon the prelims. Analysts would typically only look in the Annual Report for information that the prelims did not already provide. The comments were consistent with the findings in Tarca et al. (2011) which highlights that despite significant information being provided to the market through other communications that the MD&A was indeed useful in creating a comprehensive historical benchmark which can be used as a basis for 'predicting the future'. Many respondents in that study did state that the MD&A was not a source of new information.

'I build my models on information that I get immediately, rather than rely on information that will come later in the Annual Report.' Q19

In terms of financial performance measures, analysts were interested in KPIs that provided further information on organic revenue growth, return on capital employed, and free cash flow generation. Many interviewees mentioned the importance of adequately measuring return on capital and equity:

"The principal measure [that] you're using in all cases is does it actually generate any return?" Q18

> *"Numbers, pure revenue are meaningless without the backdrop of the factors that drive those numbers to the position they're in" Q39*

The revenue growth measure manifested itself differently in different industries. For example, in food retail, as previously discussed, a key KPI is like-for-like sales. Like-for-like provides a comparison of sales given constant capital. Food retail analysts were also interested in 'spend per new square foot'. KPIs were also of value in different parts of the industry, i.e., within the telecoms industry, where the ARPU measure (average revenue per user) was relevant in certain sections but not in others.

A very useful element of the KPIs was the information they provide to allow the analyst to disaggregate sales into price and volume. There is no statutory requirement to provide data on price and volume, and therefore KPIs that provide insight in whether sales growth is a result of volume growth or price rises are very valuable. Analysts commented on how disaggregated sales growth figures could change their perceptions of the company.

> *"For example it's price vs volume. If ARPU goes down its okay if you are still growing volume. If volume goes down it may not be bad as long as price goes up." Q18*

Apart from disaggregation of sales data into price and volume, there was also widespread interest in sales breakdowns by customer type and by product type. There was also recognition that that too much information in KPIs (in particular with respect to sales breakdowns) may reveal sensitive information to competitors.

Another important KPI mentioned by some analysts is share price performance, in particular total shareholder return (TSR) relative to peer group. The attraction of this metric for some analysts was that the company was not in a position to adjust it. Analysts also mentioned that they were interested in working capital constraints set by the company, for example if customer payment cycles are allowed to be relaxed from 30 days to 120 days, then this could be the source of reported growth. These metrics are often the subject of separate disclosure requirements for quoted companies under s417 5c) of the Companies Act 2006.

Other KPIs included those that were drivers for cost and expenses. For example, in the airline industry, analysts looked at non-financial indicators such as load factors (an occupation metric), fuel consumption, and average employee count. Capital employed and free cash generation were often measured inconsistently (or in some analyst's views incorrectly) and they had developed standardised calculations for these measures themselves, which also improved comparability.

Interestingly the analysts did not find information on remuneration particularly useful, only to the extent that it provided information on incentive drivers:

> *"If I were to say parts that I don't use in there or that I don't really use, the vast majority of the Director Reports on attendance to meetings and that kind of stuff. And the vast majority of the stuff about pay information or history pay information I'm not that interested in [...] I don't really care that much about that. I do focus on forward looking information about incentive plans, how they're incentivised and what they're being encouraged to aim for."Q35*

Information viewed as less informative, in general, included disclosures about management and corporate governance.

> *"I view governance kind of as a tick or cross thing, if the governance is okay you kind of don't need to pay much attention to it"Q35*

Risk assessments are linked to analysts' use of KPIs. If KPIs are very volatile, in the absence of other factors it may suggest that the measure itself is of uncertain value. If they are very predictable than there is lower risk.

Analysts also highlighted IFRS rules that made it harder to disentangle operating items from non-operating items. One analyst gave an example of amortisation. IFRS allows operating and non-operating items classified as amortisation, but companies rarely disaggregate the number, and when do they do, only on an annual basis. In another example, one analyst highlighted his preference for the direct method of calculating cash from operating activities in the cash flow statement, as this provided a direct link to the operational side of the business:

> *"I like it when a cash flow statement kind of starts from EBITDA and then works down from there, whereas often you have it starting from net income, with all the funnies that've been taken through the P&L and then kind of adjusted from there. And that just adds extra complications" Q20*

Analysts strongly agreed that the KPIs were helpful in forecasting underlying performance. KPIs can help to track progress towards company's public targets, although analysts were adverse to managers providing explicit forecasts on KPIs. Some did not see much sense in it, given the many external factors that could thwart the target, notably foreign currency movements. It would also remove commercial flexibility, and would reveal a great deal of intended strategy and commercial thinking.

> *"The trouble is management are under intense pressure to give you a number. [...] and only the strongest are able to say "I don't know. Look at what I've done, come to your own view" [..] which is the correct answer." Q34*

Standardisation and consistency of calculation

Many KPIs are adjustments to GAAP numbers, in order to make them more useful in showing the company's underlying performance. For example, in alcohol and tobacco markets the adjustments are excluding excise duties.

Analysts confirmed that the calculation and adjustment of many KPIs was inconsistent across companies, with many expressing the degree of inconsistency in very strong terms. To respond to this inconsistency, many recalculated the KPIs using their own standardised formulas. For example, although many companies adjust their KPIs for foreign exchange, at least one analyst was not appreciative of that adjustment:

> *"Foreign exchange happens; it's a fact of life, not adjustable. The world doesn't stand still, so we ignore that"*

Even year-on-year KPI disclosure in one company could be inconsistent. Sources for this inconsistency included the fact that for commercial reasons, companies change their divisions or business segments and/or their strategy is subject to change resulting in new performance measures for the business. Another source of inconsistency revolved around the homogeneity of the sector. If the industry does not have relatively homogeneous sectors, then consistency is more difficult.

> *"It's the difficulty, you've summed up the difficulty of my job basically' Q20 (2)*

> *'As with many aspects of an analysts work, one has to be alert to the definition of terms and the tendency of companies to put the best possible gloss on things" Q28*

According to many, there were inconsistencies in KPI calculation although some said that industries were getting more consistent at calculating these measures. This links back to agency theory and the reduction of information asymmetries driven by the market as a whole. This is consistent with research on the MD&A, in reports from SEC registrants. Tarca et al. (2011), found, in their interviews with preparers of financial information, that there were opposing views with some stating that disclosures become normalised through a process of monitoring competitors, to increase comparability and reduce asymmetry across the sectors in question. Others reflected that the analysis provided was limited to 'the barest minimum information' to maintain the proprietary nature of information provided (Tarca et al. 2011)

In certain instances, companies disclose KPIs where they have not been required. One analyst provided a supermarket chain as an example:

> *"What's always interesting is that [company] publishes like for like figures. It's a privately-owned company, and they actually so want to be compared; they want to be*

benchmarked against their rivals, who in this country are largely listed, so they actually publish these figures and send them to us"Q39

Others argued that inconsistency would never disappear completely given that every company was unique in some way. In a similar vein, analysts looked at resolving inconsistencies as an important part of their job:

"You're constantly looking at what they report, questioning it, thinking is that how I would adjust it and then trying to liken companies with other companies that are actually fairly different [...] Part of the challenge and the ongoing debate of my job is being cynical and going through, taking these various figures what are not the same company by company and applying a level of logic to try and make a comparable figure between the companies.[...] There's not a right answer. It's always slightly subjective." Q20 (4)

One analyst expressed his objection in strong terms:

"And what it doesn't need is another International Accounting Standards Board"Q38

One of the key reasons that analysts continue to occupy a strong position in the markets is that they possess such a detailed body of knowledge about the sector and companies that they cover. This enables them to interpret the information presented to them in a way that those less familiar with the industry cannot and prevents the disintermediation of their market. This is supported by the ability to cut through disparate financial reporting and apply a high degree of professional judgement to the narratives presented by the companies they cover highlighting both the consistencies and inconsistencies.

External Assurance of KPIs by Audit Firms

Analysts showed little faith in the abilities of auditors to audit the KPIs:

"*There's still too many issues where the basic numbers aren't right. They should focus on making sure their audits and the numbers are consistent and reliable before moving on to anything else" Q38*

"Best they don't get involved. It is apt to make companies less willing to disclose things. Companies that take liberties at the moment tend to get found out and punished via adverse coverage in the financial press." Q38

"My concern is that you would lose the usefulness of the front half" Q38

In addition, some felt that assuring KPIs required deep industry knowledge of auditors, which not all of them have in sufficient detail.

Some analysts highlighted that there was pressure coming from markets on how to calculate KPIs, such as those related to organic revenue growth. Others said there was no real incentive for externally assuring KPIs:

"In my experience, companies are keen to ensure that their affairs are well understood and rarely report KPIs in a misleading way." Q38

In addition, analysts mentioned the cost of assuring data that was not mandatory, and warned that audit costs might then prevent the company from disclosing the information in the first place.

Other analysts did express a degree of concern about the content of the disclosures implying that the checking of the calculation by a third party would indeed provide a degree of comfort.

"It's hard to know exactly what checking goes on inside these companies, and I guess everything, eventually, comes out in the wash." Q38

Discussion

This study sought to contribute to the academic literature on financial disclosure by looking at common elements of KPI usefulness, standardisation, and assurance of KPIs from the viewpoint of the professional equity analyst. A number of findings are summarised in this section, along with how this relates to previous findings in the literature.

A critical aspect of information usefulness was the ability of KPIs to provide new, and more detailed information about the revenue generating ability of the company, particularly in terms of price and volume (disaggregation of sales revenue) and breakdowns of the sales (by product type and customer type). It would appear that, across industries, any KPI that sheds more light on the aggregated revenue figure (the "top line") of the company is useful, particularly those allowing revenue to be split into separate components. Whilst academic work on KPIs has moved away from cross-industry generalisations, it would appear that there does exist commonality in industry-specific KPIs, specifically in the way they lead to, and contribute to company revenue. It would be an interesting avenue for further research to examine the commonalities in, say, airline, telecom, and retail KPIs, given that this study has identified that they serve a common purpose, at least from the equity analysts' perspective.

Timing also was also identified as an important attribute in terms of information usefulness. The Annual Report itself was seldom the medium through which KPI were accessed for the first time, as preliminary announcements invariably preceded the release of the Annual Report[2]. Analysts are under time pressure to release their revised share recommendations and will often produce recommendations within minutes of the announcement of the company's preliminary results. The influence of the media plays an important role, as analysts compete for media attention, and the media will often select only the first recommendations to qualify for media exposure. Whilst companies listed on the Main Market of the LSE are required to file their annual report and accounts within four months of year-end there remains in most

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[2] The UK listing rules require that preliminary statements of annual results be agreed with the listed company's auditors prior to publication, even though an audit opinion need not yet have been issued (Financial Conduct Authority, 2012). As a result, some but not all KPIs can be disclosed in the preliminary statement with further information being made available in the investor presentation.

cases a lag between the release of the preliminary results and the Annual Report. The consequence is that the market focus diverts from the Annual Report as analysts react to the information in the prelims to re-evaluate their opinions on the various companies.

To put it crudely, equity analysts do not look at the Annual Report as a source of information but as a source of triangulation, i.e., to verify that the figures they have put in valuation models have not changed since the time they were first announced. This timing aspect of financial disclosure has received very little attention in the literature, and, for example, does not feature prominently in Gibbins et al. (1999) framework. The Gibbins et al. model does conceptualise timing as disclosure dependent variable, but suggest it be measured using the number of days between fiscal year end and first earnings news. Given that this study identified that professional equity analysts operate under time pressure in a media-rich environment, it would be a useful avenue for further research to provide a more comprehensive model of disclosure timing.

The information provided in the KPIs is particularly useful when it provides an insight not otherwise available to the analyst through their calculation based-approach. One criticism was that some of the information would benefit from clear reconciliations so that analysts can identify the adjusting items. This was recommended by Reporting Statement 1 (Accounting Standards Board - Operating and Financial Review, 2006) and identified in the Deloitte survey (Deloitte, 2014). 20% of KPIs reported in the Deloitte sample were taken from the financial information in the accounts and therefore did not need to be reconciled (Deloitte, 2014).

A further finding is that the equity analysts did not seem particularly interested in the remuneration reports.

Analysts were more interested in the past and future performance of the company as opposed to the specific details about particular managers. Incentive plans were looked at from the viewpoint of the company's interest. It is generally accepted that incentive plans that drive specific behaviors can lead to incentives for earnings management, if they are not adequately aligned with the company's predicted performance, and so are of interest at the company level. Of course, typically the individual managers have the opportunity for earnings management rather than the institution as a whole.

Following the recent change to the Companies Act 2006 (Cabinet Office, 2006) requiring a shareholder vote on executive remuneration it has received significant coverage in the media and the academic literature. However, this displeasure has typically focused on a small number of high profile cases, frequently where the individual is long associated with the company's success (Burn-Callander, 2015). From an equity analyst perspective, it would seem that work in this area is perhaps less relevant that may first appear, and consequently, may not need prioritization.

Standardisation

In terms of comparability, the lack of consistency was a key common element in all analyst interviews. Many, however, viewed it as part of their role to resolve that consistency to achieve comparability. This result is interesting because many stakeholders outside the analyst profession view consistency of calculation as a positive that companies ought to attain. If such consistency is established it could be that equity analysts feel that some of their benefit is under threat. More realistic, however, is that comparability and consistency of KPIs is indeed very hard to obtain without substantial compromise, and that companies within industries, and even industry sectors, are hard to compare like for like on standardised KPI measures.

This is because the intended use of KPIs is to provide increased information on the company's performance and that each company is unique in its history, strategy and composition. As a result the narrative around the company's "development, performance or position" (Cabinet Office, 2006) will necessarily differ. To provide standardisation dilutes the ability of the analyst to apply their professional judgement to how the company is representing itself and the measures it presents to the users of the Annual Report.

It may not be desirable to have industry-prescribed KPIs but, the measures need to provide users with some comfort that they can be calculated consistently each year. Auditing the KPI calculation in the manner proposed by ICAEW (ICAEW Audit and Assurance Faculty, 2014) would be one means of achieving this without prescribing a set method or disclosing sensitive competitive information would be to. This would ensure that year on year changes in the method of calculating various measures are highlighted thereby reducing the capacity to mislead all but the most sophisticated users of the Annual Report.

Assurance

In terms of assurance of KPIs, equity analysts did not look to audit firms to provide it, and preferred it if KPIs were left unaudited. There was general scepticism to the extent that audit firms would be able to fulfil an assurance role, and analysts were concerned that once the KPIs became part of an audit review, the intended flexibility would be reduced.

This result is also interesting because audit firms would seem a natural candidate to fulfil the assurance role, as they are currently already in an assurance position for GAAP specific figures. In fact, as noted earlier there are instances where KPIs are already subject to assurance and assurance over the metrics (ICAEW Audit and Assurance Faculty, 2014) would improve consistency, which was a key complaint from the analysts.

In conclusion, the analysts looked at KPIs as one of the means to understand the underlying narrative of the company. KPIs are part of a broader story that management communicate about the company, and analysts use the KPIs together with preliminary presentations, earnings announcements, and other cues, to understand whether the story has elements of impressions management and whether the storyline is credible.

The Gibbins et al framework has formed the basis of this study, and to an extent, this framework has proved to be a useful model, covering off many angles of relevance and importance. In particular, the role of Investor Relations departments and Public Relations agencies in the corporate story and the extent to which the board/audit committee are practically involved in setting the disclosure strategy could provide further research insights into the independent variables in the model.

Appendix 1

INSERT Questionnaire

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Table 1: Age, experience and industry coverage of the equity analysts in the study. All analysts were male.

	Age	Experience	Industry
1	41-50	14 Years	Media Services
2	31-40	15 Years	Oil Services
3	31-40	8 Years	Food Retail
4	31-40	7 Years	Telecoms
5	51-60	25 Years	Consumer Goods
6	41-50	17 Years	Transport & Logistics
7	41-50	> 5 Years	Consumer Services
8	31-40	7 Years	Consumer Goods
9	31-40	8 Years	Consumer Goods
10	31-40	5 Years	Industrials
11	51-60	28 Years	Travel and Leisure
12	51-60	27 Years	Retail